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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,052	08/21/2003	Lewis Albert Haws	ITW-14144	6538
7590 05/10/2004			EXAMINER	
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30th Floor			ART UNIT	PAPER NUMBER
825 Third Avenue			3721	
New York, NY 10022-7519			DATE MAIL ED: 05/10/200	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/645,052	HAWS, LEWIS ALBERT				
Office Action Summary	Examiner	Art Unit				
	Louis K. Huynh	3721				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 03 Ma	arch 2004.					
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<del>, _</del>						
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-6 and 16-48 is/are pending in the application.</li> <li>4a) Of the above claim(s) 1-6 and 25-39 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 16-24 and 40-48 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 21 August 2003 is/are:  Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examiner	a) $\square$ accepted or b) $\square$ objected to drawing(s) be held in abeyance. See on is required if the drawing(s) is objection.	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)	<del>-</del>					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/21/03.</li> </ol>	4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te				

Application/Control Number: 10/645,052 Page 2

Art Unit: 3721

#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election of Group III, claims 16-24, filed 02/06/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

- 2. New claims 40-48 are drawn to the same subject matter of the elected Group III; thus will be examined along with elected claims 16-28.
- 3. Claims 1-6 and 29-39 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions.

## Claim Objections

4. Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for depending upon itself. Applicant is required to amend the claim to place the claim in proper dependent form. For the purpose of examination on the merits, Claim 22 is considered to be depending on Claim 18.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3721

6. Claims 16, 17, 19-21, 24, 40, 41, 43-45 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant Admitted Prior Art) in view of Meihofer (US 3,912,145).

With respect to Claims 16 and 40, AAPA discloses a known thermoforming packaging machine including: a joining station (34) having means (inherent) for joining a portion of a first elongated continuous structure (bottom film 16) to a portion of a second elongated continuous structure (top film 30); means (clamper chain) for intermittently advancing the first elongated continuous structure along a first process pathway that passes through the joining station; means (roller 26) for guiding the second elongated continuous structure along a second process pathway that passes through the joining station. The known AAPA packaging machine meets all of applicant's claimed subject matter but lacks the specific teaching of a first and second rollers forming a nip upstream of the joining station and a torque control device for applying an output torque to the first roller in a direction opposite to the direction of a load torque exerted on the first roller when the second elongated continuous structure is being pulled by the advancing first elongated continuous structure such that a desired tension of the second elongated continuous structure between the nip and the joining station is produced.

Meihofer discloses a web tension control system including a first roller (10) and a second roller (18) forming a nip for feeding web (W), dancer rollers (32, 34), a torque control device (62 & 64) for applying an output torque (holdback torque) to the first roller (10) in a direction opposite to the direction of a load torque exerted on the first roller when the web (W) being pulled to change the web tension to reposition the dancer rollers in order to maintain the web at a desired tension (col. 4, lines 8-20).

Art Unit: 3721

Since the web tension control system of Meihofer is to maintain a web at a desired tension and the top film of AAPA must be maintained at a desired tension just prior to being fed into the joining station; therefore it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have modified the AAPA packaging machine by having provided the web tension control system including a first and second rollers and a torque control device, as taught by Meihofer, in order to maintain the top web at a desired tension so that the top web could be joined properly to the bottom web.

With respect to Claims 17 and 41, Meihofer teaches that the output torque of the torque control device is substantially constant during normal operation (col. 8, lines 52-54).

With respect to Claims 19 and 43, Meihofer teaches that the torque control device (62 & 64) comprises magnetic particle clutches (col. 7, lines 8-14).

With respect to Claims 20 and 44, Meihofer teaches that the torque control device (62 & 64) comprises magnetic particle clutches (col. 7, lines 8-14), and such magnetic particle clutch comprises an input shaft (62a, 64a), output shaft (62b, 64b), and means (inherent in a typical magnetic particle clutch) for coupling the input and output shafts, wherein the output shaft slips relative to the input shaft by controlling the current in the clutch coil (col. 7, lines 5-8).

With respect to Claim 21 and 45, the web tension control system of Meihofer includes dancer rollers for accumulating portions of the web in order to maintain the proper tension of the web; therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have included the dancer rollers in the modified AAPA packaging machine, as taught by Meihofer, in order to maintain the proper tension of the second elongated continuous structure (top film). As the advancement of first elongated continuous structure

Art Unit: 3721

stops, the torque control device would also stop, the incorporated dancer rollers would accumulate portion of the second elongated continuous structure so as to keep the second elongated continuous structure at a proper tension.

With respect to Claim 24 and 48, the AAPA packaging machine includes a thermoforming die for thermoforming a respective section of the first elongated continuous structure into a respective pocket before that section is joined to the second elongated continuous structure (specification; page 10, line 23- page 11, line18).

7. Claims 16-23 and 40-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinigakis et al. (US 6,675,558) in view of Meihofer (US 3,912,145).

With respect to Claims 16 and 40, Kinigakis discloses a vertical form fill seal machine for making flexible packages with slider fastener closure, including a joining station having means (250) for joining a portion of a first elongated continuous structure (web 206) to a portion of a second elongated continuous structure (zipper fastener track 210); means (226 & 248) for intermittently advancing the first elongated continuous structure (206) along a first process pathway (forming tube 240); means (344) for adjusting tension of the second elongated continuous structure (210) (col. 14, line 48-col. 15, line4). The vertical form fill seal machine of Kinigakis meets all of applicant's claimed subject matter but lacks the specific teaching of a first and second rollers forming a nip upstream of the joining station and a torque control device for applying an output torque to the first roller in a direction opposite to the direction of a load torque exerted on the first roller when the second elongated continuous structure is being pulled

Art Unit: 3721

by the advancing first elongated continuous structure such that a desired tension of the second elongated continuous structure between the nip and the joining station is produced.

Meihofer discloses a web tension control system including a first roller (10) and a second roller (18) forming a nip for feeding web (W), dancer rollers (32, 34), a torque control device (62 & 64) for applying an output torque (holdback torque) to the first roller (10) in a direction opposite to the direction of a load torque exerted on the first roller when the web (W) being pulled to change the web tension to reposition the dancer rollers in order to maintain the web at a desired tension (col. 4, lines 8-20).

Since the web tension control system of Meihofer is to maintain a web at a desired tension and the second elongated continuous structure (210) used in the vertical form fill seal machine of Kinigakis must be maintained at a desired tension just prior to being fed into the joining station; therefore it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have modified the vertical form fill seal machine of Kinigakis by having provided the web tension control system including a first and second rollers and a torque control device, as taught by Meihofer, in order to maintain the second elongated continuous structure (210) at a desired tension so that the second elongated continuous structure could be joined properly to the first elongated continuous structure.

With respect to Claims 17 and 41, Meihofer teaches that the output torque of the torque control device is substantially constant during normal operation (col. 8, lines 52-54).

With respect to Claims 19 and 43, Meihofer teaches that the torque control device (62 & 64) comprises magnetic particle clutches (col. 7, lines 8-14).

Art Unit: 3721

With respect to Claim 18, the second elongated continuous structure (210) used in the vertical form fill seal machine of Kinigakis is zipper fastener track (210).

With respect to Claims 20 and 44, Meihofer teaches that the torque control device (62 & 64) comprises magnetic particle clutches (col. 7, lines 8-14), and such magnetic particle clutch comprises an input shaft (62a, 64a), output shaft (62b, 64b), and means (inherent in a typical magnetic particle clutch) for coupling the input and output shafts, wherein the output shaft slips relative to the input shaft by controlling the current in the clutch coil (col. 7, lines 5-8).

With respect to Claim 21 and 45, the web tension control system of Meihofer includes dancer rollers for accumulating portions of the web in order to maintain the proper tension of the web; therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have utilized the registration roller (280) in the registration station (344) of the Kinigakis vertical form fill seal machine as a dancer roller for accumulating portion of the second elongated continuous structure, as taught by Meihofer, in order to maintain the proper tension of the second elongated continuous structure (top film). As the advancement of first elongated continuous structure stops, the torque control device would also stop, the incorporated dancer roller (280) would accumulate portion of the second elongated continuous structure so as to keep the second elongated continuous structure at a proper tension.

With respect to Claims 23 and 47, the Kinigakis vertical form fill seal machine also includes a slider insertion device (360) for inserting a slider (30) on a respective undeformed portion of the fastener tracks (col. 15, line 62-col. 16, line 7).

Art Unit: 3721

Claims 22 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinigakis et al. (US 6,675,558) in view of Meihofer (US 3,912,145) as applied to Claim 22 and 46 above; and further in view of Buchman (US 6,517,242).

With respect to Claims 22 and 46, the second elongated continuous structure (210) comprises mated fastener tracks and the Kinigakis vertical form fill seal machine also include a stop forming station (220) for forming spaced apart slider stop (68) on the fastener tracks.

However, Kinigakis does not expressly disclose a specific means for forming the slider stop.

It is known in the art that ultrasonic welding assembly is used to fuse and deform respective portions of the fastener tracks, Buchman teaches such application in US Patent No. 6,517,242; col. 6, lines 48-54. Therefore, it would have been obvious to an ordinary skilled person in the art, at the time the invention was made, to have provided the Kinigakis vertical form fill seal machine with an ultrasonic assembly for fusing and deforming the fastener tracks in order to form spaced apart slice stops on the fastener tracks.

### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure has been cited on form PTO-892 along with the applied prior art.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (703) 306-5694. The examiner can normally be reached on M-F from 9:30AM to 5:00PM.
- 10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (703) 308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Page 9

Application/Control Number: 10/645,052

Art Unit: 3721

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LH May 05, 2004 Louis K. Huynh
Patent Examiner
Art Unit 3721